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36. (New) The computer program according to claim 13, wherein the plurality of coils includes coils arranged in a first direction and coils arranged in a second direction different than the first direction, and

wherein applying an oscillating signal includes applying the oscillating signal only to coils arranged in the first direction.

IN THE ABSTRACT OF THE DISCLOSURE:

Please delete the present Abstract of the Disclosure and replace it with the following new Abstract of the Disclosure.

A lithographic apparatus has a positioning system for positioning an object table. The positioning system includes a planar motor having a stator and a translator, one comprising a periodic magnet structure and the other comprising a plurality of coils. The phase relationship between the stator and translator is determined by energizing at least some of the coils with an oscillating signal sufficient to cause vibrations of the translator, measuring the vibrations, and determining the phase relationship between the translator and stator on the basis of the measured vibrations. Alternatively, the relationship between stator and translator may be determined by detecting distinct optical marks on the periodic magnet array.

See the attached Appendix for the changes made to effect the above Abstract.